

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
9 June 2005 (09.06.2005)

PCT

(10) International Publication Number
WO 2005/052166 A1

(51) International Patent Classification⁷: C12N 15/63,
A61K 38/10, 39/39

(21) International Application Number:
PCT/KR2003/002613

(22) International Filing Date:
29 November 2003 (29.11.2003)

(25) Filing Language: Korean

(26) Publication Language: English

(71) Applicants and

(72) Inventors: CHAE, Young-Jin [KR/KR]; #202 Dae-
woomejongribr, 750-1, Janghnag-dong, Ilsan-gu,
Goyang-si, 430-043 Gyeonggi-do (KR). CHOI, Eun-Wha
[KR/KR]; 932-103, Gwanaksa, San 4-1, Bongchun 7-dong,
Gwanak-gu, 151-818 Seoul (KR).

(74) Agent: KIM, Seog Hyun; 9th Floor, Daekyung Building,
120, 2-ga, Taepyeong-ro, Chung-ku, Seoul 100-724 (KR).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,
RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

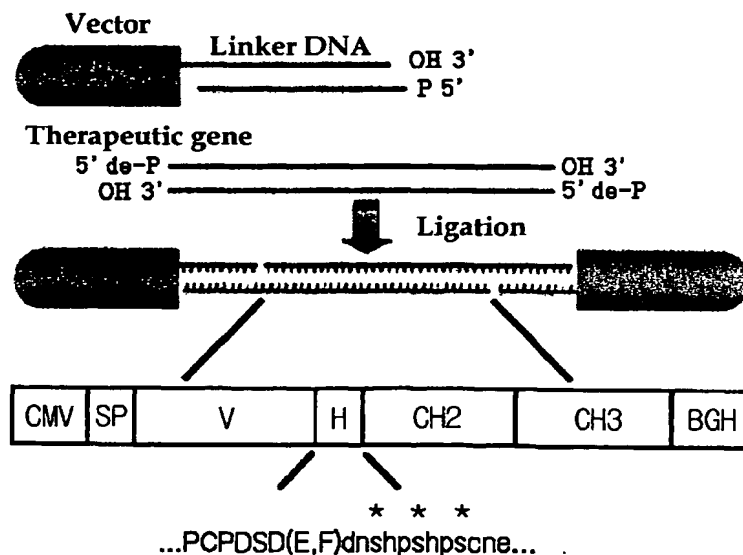
(84) Designated States (*regional*): ARIPO patent (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA,
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: RECOMBINANT PEPTIDE VECTOR COMPRISING THE GENE FOR TREATMENT FOR AUTOIMMUNE DIS-
EASES.



(57) Abstract: The present invention provides a recombinant peptide vector comprising a leader peptide, linker DNAs and a DNA construct formed by operably linking expression control sequences with a therapeutic gene encoding a fusion protein where the extracellular domain of CTLA4 is bound to the Fc fragment of immunoglobulin, wherein the leader peptide is linked to both ends of the DNA construct by the linker DNAs. Also, the present invention provides a method for preparing the recombinant peptide vector, and a pharmaceutical composition for the treatment of autoimmune diseases, which comprises a pharmaceutically effective amount of the recombinant peptide vector, and a pharmaceutically acceptable carrier.

BEST AVAILABLE COPY

WO 2005/052166 A1